

**Table S2.** Kinetic parameters  $K_m$  ( $\mu\text{M}$ ) for base pairings when the previously inserted nucleotide is a correct Watson-Crick pair [1].

<b>Base pairings</b>	<b>T</b>	<b>G</b>	<b>C</b>	<b>A</b>
<b>A</b>	0.6	800	540	25
<b>C</b>	180	0.8	140	160
<b>G</b>	200	150	0.9	250
<b>T</b>	57	70	360	0.8

The array order is the same as in Table S1.

## REFERENCES

1. Johnson AA, Johnson KA (2001) Fidelity of nucleotide incorporation by human mitochondrial DNA polymerase. *Journal of Biological Chemistry* 276: 38090-38096.